

### CITY OF BURBANK

## **Burbank Water and Power**

#### STAFF REPORT

**DATE:** October 30, 2012

**TO:** City Manager

**FROM:** Ron Davis, General Manager, Burbank Water and Power

SUBJECT: 2011 RENEWABLE PORTFOLIO STANDARD COMPLIANCE UPDATE

AND REQUEST THAT COUNCIL ADOPT BURBANK WATER AND POWER'S FIRST AMENDED CALIFORNIA RENEWABLE ENERGY

**RESOURCES ACT COMPLIANCE PLAN** 

# **RECOMMENDATION**

Staff is presenting an update on the 2011 Renewable Portfolio Standard (RPS) and requests that the City Council adopt the First Amended Renewable Energy Resources Act Compliance Plan. The Compliance Plan meets the enforcement and procurement plan requirements imposed on every publicly-owned utility (POU) in California by legislation, 2011 Senate Bill, California Renewable Energy Resources Act, known as SBX1 2.

#### **UPDATE**

The following table summarizes the progress made by BWP during the 2011 calendar year toward meeting the Compliance Plan mandate.

Only Includes WREGIS Certified/Eligible RECs													
	Jan-11	Feb-11	<u>Mar-11</u>	Apr-11	<u>May-11</u>	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	<u>Nov-11</u>	Dec-11	TOTAL
Retail Sales - MWh	90,269	85,567	84,686	88,280	87,001	90,103	101,068	104,378	114,809	101,512	90,164	87,420	1,125,25
Renewables - MWh													
Micro Hydro - Valley Plant	-	-	-	-	-	-	-	-	-	-	-	-	
Micro Turbines - Burbank Landfilll	-	-	-	-	-	-	-	-	-	-	-	-	
Customer Solar	-	-	-	-	-	-	-	-	-	-	-	-	
Utility Solar	-	-	-	-	-	-	-	-	-	-	-	-	
Ameresco	1,012	1,126	1,162	1,386	569	721	569	337	677	727	259	532	9,0
Wyoming Wind - Pleasant Valley	1,756	1,618	1,288	1,416	1,070	827	531	633	472	1,191	1,376	1,267	13,4
Utah Wind - Milford	711	1,681	2,633	2,020	1,882	2,205	1,786	2,058	678	1,172	1,702	963	19,4
Oregon Wind - Pebble Springs	1,584	1,571	1,224	2,673	2,599	3,197	2,719	2,903	1,418	1,785	1,822	849	24,3
Tieton	1,095	2,071	1,411	2,996	3,621	5,647	5,121	2,996	5,074	1,427	-	-	31,4
Biogas	-	-	-	-	-	-	1,957	1,528	7,708	11,902	8,674	8,483	40,2
Other													
	6,158	8,067	7,718	10,491	9,741	12,597	12,683	10,455	16,027	18,204	13,833	12,094	138,0
Percent Renewable	6.82%	9.43%	9.11%	11.88%	11.20%	13.98%	12.55%	10.02%	13.96%	17.93%	15.34%	13.83%	12.2
CALENDAR YEAR AVERAGE	12.3%												

Based on the November 2011 Compliance Plan, it was expected that the progress during the calendar year would amount to 13.2 percent of retail sales. As the foregoing table shows, actual performance was slightly under at 12.3 percent. The reason for the shortfall is attributable to local, or owned, facilities not yet being recognized by the Western Renewable Energy Generation Information System (WREGIS) due to inadequate metering. These facilities amount to approximately 1 percent of projected renewable energy credits (RECs). With roll-out of the automated meter program, staff is working to resolve these issues and expects that shortly BWP will be able to comply with the WREGIS metering requirements and have the RECs recognized.

### **BACKGROUND**

## **Existing/Grandfathered Contracts:**

Burbank's existing portfolio of operating renewable facilities continues to perform well. No major issues are pending. During the last operating year, there was an abundance of hydropower in the Pacific Northwest which resulted in production from the Tieton facility being approximately 30 percent above average. However, this was offset by lower than expected production of approximately 80 percent of normal from Pebble Springs. These grandfathered resources are being classified as "count-in-full" resources, which mean they count against BWP's overall renewable target but are not associated with any of the three product compliance categories of SBX1 2. (The three compliance categories are described in paragraphs 2 through 5 of the First Amended California Renewable Energy Resources Act Compliance Plan – EXHIBIT A.)

#### DISCUSSION

### Recent Procurement Initiatives since Passage of SBX1 2:

As described in the November 22, 2011 Compliance Plan, BWP indicated that it expected to contract for additional renewable energy resources as follows:

<u>Biogas:</u> Consistent with authorization from Council on July 16, 2011, BWP entered into contracts totaling 3,000 dekatherms per day ("Dth/day") of biomethane with four different suppliers which will produce approximately 155,000 megawatt hours ("MWh") annually when burned at Magnolia.

The Compliance Plan is unclear on whether Burbank, or the California Energy Commission (CEC), has "final" authority to classify which resources fit into which compliance category. In its' Compliance Plan, Burbank has elected to designate the energy produced by burning biomethane in Burbank as a Bucket 1 product. However, during the past several months, there has been an ongoing debate about whether energy produced by burning biomethane should be counted as Bucket 1 renewable energy. Arguments have been raised from not counting it at all to having it "count in full," to counting it as a Bucket 1 resource. On March 28, 2012, the CEC imposed a moratorium on certification of new biomethane contracts. This action does not appear to have a material effect on BWP's contracts because they were certified last calendar year.

Earlier this year, the Legislature passed Assembly Bill 2196 (AB 2196) which was supposed to clear up the ambiguity surrounding the RPS eligibility of biomethane. Although existing contracts for biomethane were grandfathered, the legislation was not clear on which Compliance Category the energy produced would fall under. Staff will now be working with the California Energy Commission as it develops the regulations associated with AB 2196 to ensure that out-of-state biomethane burned in California is treated as Compliance Category 1.

Currently, the situation regarding how to classify energy produced by out-of-state biomethane remains uncertain. Further, it has the potential to affect another renewable energy transaction that Burbank entered into described below.

• Third Party Exchange Agreement: On April 1, 2012, Burbank began sending energy to Morgan Stanley under a five-year exchange agreement. Under that agreement, Burbank will receive renewable energy from Morgan Stanley each year from June 1<sup>st</sup> through October 31<sup>st</sup> from a facility located in southwest Washington State. Because the energy from this facility is being shaped and re-delivered at times different from when it is generated, staff expects that the RECs from this transaction will be classified as a "Compliance Category 2" product.

The contract has been working well for both parties.

However, the uncertainty with respect to combustion of out-of-state biomethane has had an unintended consequence. The California Renewable Energy Resources Act requires a utility to procure a specified amount of Bucket 1 energy prior to procuring any Bucket 2 or 3 energy. However, because of the confusion and uncertainty surrounding the compliance category treatment of biomethane, BWP potentially could find itself in the situation of having bought Bucket 2 energy but not being able to count it because BWP did not acquire sufficient Bucket 1 energy. To eliminate this risk, staff proposes to either restructure the delivery arrangements associated with this agreement to make it either Bucket 1 or terminate the renewable energy portion of the agreement entirely.

- La Paz: The November 22, 2011 Compliance Plan listed the La Paz development as a grandfathered resource because, at that time, staff had received approval from Council to enter into an agreement for this resource. However, the Southern California Public Power Authority (SCPPA), which was negotiating on behalf of its participants, never executed a power purchase agreement with the developer and, therefore, a pass-through contract for the resource was never executed between Burbank and SCPPA. Below is a summary of the concerns that arose shortly thereafter regarding the viability of the project for the reasons described below:
  - First, the developer never found sufficient other interest in the project to get subscription up to the level necessary to make it viable. SCPPA participants had indicated an interest in 64 megawatts ("MW") but no one else stepped up for the remainder of the 200 MW facility.
  - Due to lack of subscription, critical project milestone dates were missed and the in-service date kept slipping.
  - The developer was unable to prove to SCPPA's satisfaction that it had the necessary financing to carry on with the project. Although the contract is ready for execution, SCPPA is delaying execution because despite repeated promises to do so, the developer has not yet produced a required letter of credit (LOC).
  - Due to these delays and the resulting perception that the developer could not perform as promised, parties who had earlier expressed interest in participating began dropping out.

Consequently, staff is recommending that La Paz be formally removed from Burbank's Compliance Plan.

## **Proposed Changes to the November 22, 2011 Compliance Plan:**

To replace La Paz, staff is recommending the addition of substitute resources as follows:

- Photovoltaic Solar: During the past year, the cost of photovoltaic solar has dropped by almost one-third making it a very attractively-priced source of renewable energy. In view of this, staff proposes to acquire 40 MW of this resource to partially replace La Paz. Forty (40) MW of photovoltaic solar is expected to produce approximately 87,600 MWh annually which corresponds to approximately seven (7) percent of BWP's energy requirements. The energy from this source would be scheduled on a real-time basis to a California balancing authority so it would be considered a Bucket 1 product.
- Geothermal: BWP is also working a contract with a geothermal developer for 2 MW. This resource would amount to approximately 16,000 MWh annually which corresponds to slightly more than 1 percent of BWP's energy requirements. The energy from this source would be scheduled on a real-time basis to a California balancing authority so it would be considered a Bucket 1 product

## **FISCAL IMPACT**

Recently, staff undertook an analysis to determine the impact on power supply costs of implementing the mandated RPS requirements of the California Renewable Energy Resources Act. Because BWP is a fully resourced utility, the analysis assumes that without renewable energy procured for RPS purposes, BWP would be running the Intermountain Power Project (IPP) and Magnolia more, as well as making economic energy purchases on the open market when attractively priced. In order to come up with the incremental annual, additional cost, the difference in the blended cost of these resources is subtracted from the cost of renewable energy and multiplied by the affected amount of MWh annually. The results are presented in the following table.

	Estimated	Cost of RPS Com	pliance in Indi	cated Fiscal Ye	ar	
		Burbank W	ater and Power			
Burbank is	an adequately	resourced utility so	it could replace re	newable with mo	re generation	
		from IPP, Magnoli	a, or Market Purch	ases.		
		FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Total cost of:						
Purchased power		71,368,378	61,995,193	69,356,586	78,594,445	78,854,970
Fuelrelated		21,280,265	30,934,609	30,202,294	28,181,899	28,261,249
Transmission		15,092,952	15,092,997	15,092,952	15,092,952	15,092,952
	\$	107,741,595	108,022,799	114,651,832	121,869,296	122,209,171
Percent RPS		26.02%	25.79%	30.94%	35.97%	35.66%
Renewable energy	MWh	303,579	306,868	373,744	441,732	441,732
Cost of Renewable energy	\$	26,068,902	25,960,867	33,139,795	39,772,325	39,772,325
Cost for Renewable energy	\$/MWh	85.87	84.60	88.67	90.04	90.04
Incremental Cost of:						
IPP	\$/MWh	25.00	26.00	27.00	28.00	29.00
Magnolia	\$/MWh	26.64	31.97	35.51	39.07	42.62
Spot	\$/MWh	29.60	35.52	39.46	43.41	47.36
Average incremental cost		27.08	31.16	33.99	36.83	39.66
Renewable energy Premium	\$/MWh	58.79	53.44	54.68	53.21	50.38
COST of RPS COMPLIANCE	\$	17,847,983	16,398,042	20,435,738	23,504,955	22,252,645
COST Without RPS	\$	89,893,612	91,624,757	94,216,094	98,364,341	99,956,526
PERCENT COST INCREASE DUE T	ORPS	19.85%	17.90%	21.69%	23.90%	22.26%

#### CONCLUSION

The progress made during 2011 by Burbank Water and Power towards implementing the Compliance Plan, approved by Council in November 2011, are slightly lower than the target goal for the year. However, Burbank remains well-positioned to meet the goal for the 2011–2013 Compliance Period 1 should the renewable facilities continue to perform as expected.

Staff is recommending that the City Council adopt the First Amended California Renewable Energy Resources Act Compliance Plan.

#### **EXHIBIT**

A - Burbank Water and Power
First Amended California Renewable Energy
Resources Act Compliance Plan